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Electrochemical Biosensors for Inhibitor Determination: Selectivity and Sensitivity Control

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Abstract

The behavior of cholinesterase based potentiometric and amperometric biosensors with renewable membranes toward irreversible inhibitor determination has been investigated. Tracing paper, gelatin and cellulose nitrate were examined, as membrane materials. The membranes are replaced in the biosensor assembly after 15-20 inhibition measurements. The detection limits as well as other analytical characteristics of inhibitor determination for different enzyme supports and detection systems are compared and discussed.

Keywords

Biosensor, Inhibition, Renewable membrane